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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/076,156	02/14/2002	Jae-Yoel Kim	678-803(P10165)	8621
28249	7590	09/09/2004	EXAMINER	
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553			GANDHI, DIPAKKUMAR B	
			ART UNIT	PAPER NUMBER
			2133	

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/076,156

Applicant(s)

KIM, JAE-YOEL

Examiner

Dipakkumar Gandhi

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 5/28/02, 11/15/02, 4/24/03, 5/19/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Drawings***

1. The drawings are objected to because in figure 2, item 210 is labeled as " Orthogonal Code Generator". On page 10, line 27 - page 11, line 1 of the specification, item 210 in figure 2, is described as "Walsh code generator". Appropriate correction is required. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Double Patenting***

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/957,967. Although the

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conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 1 of the two applications is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claim 2 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 2 of the two applications is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

5. Claim 3 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the Reed-Muller encoder in both claims generates the first order Reed-Muller codeword using the same steps.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claim 4 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 4 the present application and claim 11 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claim 5 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of copending Application No. 09/957,967. Although the

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conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 5 the present application and claim 12 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

8. Claim 6 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because both claims are methods for generating the first order Reed-Muller codeword using the same steps.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

9. Claim 7 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 7 the present application and claim 1 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

10. Claim 8 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 8 the present application and claim 2 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

11. Claim 9 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 09/957,967. Although the

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conflicting claims are not identical, they are not patentably distinct from each other because the Reed-Muller encoder in claim 9 the present application and claim 4 of copending Application No. 09/957,967 generate the first order Reed-Muller code-word using the same steps.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

12. Claim 10 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 10 the present application and claim 11 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

13. Claim 11 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 11 the present application and claim 12 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

14. Claim 12 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 12 of the present application and claim 14 of copending Application No. 09/957,967 are methods for generating the first order Reed-Muller codeword using the same steps.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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15. Claim 13 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 13 of the present application and claim 1 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. Claim 14 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 14 of the present application and claim 2 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

17. Claim 15 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the Reed-Muller encoder in claim 15 of the present application and claim 4 of copending Application No. 09/957,967 generate the first order Reed-Muller codeword using the same steps.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

18. Claim 16 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 16 of the present application and claim 11 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

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This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

19. Claim 17 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 17 the present application and claim 12 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

20. Claim 18 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 18 of the present application and claim 14 of copending Application No. 09/957,967 are methods for generating the first order Reed-Muller codeword using the same steps.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

21. Claim 19 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 19 of the present application and claim 1 of copending Application No. 09/957,967 is the number of bits in the input information bit stream, the size of the codeword generated by the Reed-Muller encoder, number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

22. Claim 20 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 2 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference



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in claim 20 of the present application and claim 2 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

23. Claim 21 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 4 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the Reed-Muller encoder in claim 21 of the present application and claim 4 of copending Application No. 09/957,967 generate the first order Reed-Muller codeword using the same steps.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

24. Claim 22 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 11 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 22 of the present application and claim 11 of copending Application No. 09/957,967 is the number of bits in the input information bit stream, the size of the codeword generated by the Reed-Muller encoding, number of coded symbols punctured and the location of the coded symbols punctured. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

25. Claim 23 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 12 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because the difference in claim 23 the present application and claim 12 of copending Application No. 09/957,967 is number of coded symbols punctured and the location of the coded symbols punctured.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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26. Claim 24 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 14 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 24 of the present application and claim 14 of copending Application No. 09/957,967 are methods for generating the first order Reed-Muller codeword using the same steps.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

27. Claim 25 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 25 of the present application is a subset of claim 7 of copending Application No. 09/957,967. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

28. Claim 26 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 26 of the present application is a subset of claim 17 of copending Application No. 09/957,967. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

29. Claim 27 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 27 of the present application is a subset of claim 7 of copending Application No. 09/957,967. The difference in claim 27 of the present application and claim 7 of copending Application No. 09/957,967 is the number of bits in the input information bit stream, the size of the codeword generated by the Reed-Muller encoder, number of coded symbols punctured and the location of the coded symbols punctured. This is a

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provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

30. Claim 28 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 17 of copending Application No. 09/957,967. Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 28 of the present application is a subset of claim 17 of copending Application No. 09/957,967. The difference in claim 28 of the present application and claim 17 of copending Application No. 09/957,967 is the number of bits in the input information bit stream, the size of the codeword generated by the Reed-Muller encoder, number of coded symbols punctured and the location of the coded symbols punctured. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

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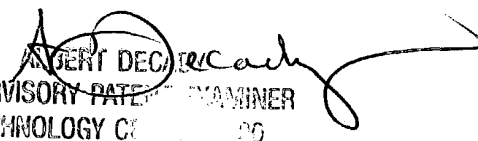
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dipakkumar Gandhi whose telephone number is 703-305-7853. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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